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## ORED Communicator - November 2017

Office of Research and Economic Development, Florida International University

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### **ORED Communicator**

#### U.S. Transportation Secretary Chao visits FIU's Engineering Center



#### November 2017

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On October 17, FIU welcomed U.S. Transportation Secretary Elaine L. Chao. After participating in a transportation and infrastructure stakeholders' meeting with Miami-Dade County representatives, Secretary Chao and Congressman Mario Diaz-Balart visited FIU's Accelerated Bridge Construction University Transportation Center (ABC-UTC), which is funded by the U.S. Department of Transportation (USDOT). While at FIU, Secretary Chao also had the opportunity to visit FIU's Wall of Wind (WOW) and FPL's Solar Facility at FIU.

After President Mark Rosenberg and Engineering Dean John Volakis welcomed Secretary Chao, Dr. Azizinamini, chair of FIU's civil engineering department and director of FIU's ABC-UTC, highlighted cost-effective university-developed technologies that can more rapidly repair existing bridges, create workforce development opportunities and incorporate new technologies. The Secretary was also briefed on FIU's vision for catastrophic disaster research and the role ABC-UTC plays in our resilience efforts.



Secretary Chao toured FIU's Titan Materials Construction Lab, where the folded-plate girder technology, as well as the high-performance concrete and shell were high-lighted. Dr. Azizinamini also discussed the introduction of robotics and 3D printing into the construction of bridges. Additionally, several graduate students had the opportunity to meet Secretary Chao and explain their current research.



The research priorities of the ABC-UTC include extending the ABC principles to repair, replace and preserve bridges; enhancing the life of bridges; developing tools, guidelines and specifications to facilitate adoption of ABC principles; and developing the next generation of decision-making tools for better communication among stakeholders.



The 2017 National Accelerated Bridge Construction Conference, sponsored by the ABC-UTC, will be held on December 7 and 8 at the Hyatt Regency Miami. More information is available at the <u>ABC-UTC</u> Conference website.

## Upcoming Events

#### **November**

- November 1, 11 am to 12 noon, WC 130, InWE Seminar Series: <u>Carbon gains and losses under nutrient enrichment in a mangrove wetland</u> presented by <u>Brita Jessen</u>
- November 8, 12 to 1 pm, AHC 1 #110, <u>How to support your teen in making good decisions about alcohol and other drugs</u>, presented by <u>Nicole Schatz</u>
- November 8, 3 to 3:50 pm, SIPA 220, Biomolecular Sciences Institute Lecture by Carlos A. Torres-Ramos
- November 17, 1:30 to 2:30 pm, GL 100A, <u>Probing Protein Conformational Dynamics from Single Molecules to Single Living Cells</u> by Peter Lu

#### **December**

- ➤ December 1, 11 am to 12 noon, AHC3 #205, <u>Hide and Seek: How to DNA Glycosylases Locate Oxidatively</u>

  Damaged DNA Bases Amidst a Sea of Undamaged Bases by Susan Wallace
- ➤ December 1, 2 to 3 pm, ECS 241, <u>IHMC Research: National Language Processing, Cyber Security and Big Data</u>, presented by <u>Bonnie Borr</u>
- ➤ December 6, 11 am to 12 noon, WC 130, Fossil fuels and fish: how physiology can provide insight into underlying mechanisms in toxicology, presented by Rachael Heuer
- December 8, 12:30 to 1:30 pm, AHC4 #402, <u>Linking pH, Temperature</u>, K+ <u>Concentration and Conformation for the DNA i-Motif</u>, presented by <u>Richard Sheardy</u>
- **December 13, 12 to 1 pm, <u>Citrus Health Network,</u>** <u>Recent studies in dosing and sequencing pharmacological</u> and behavioral treatments for ADHD: When They Go High, We Go Low, presented by William Pelham
- December 14 and 15, 8 am to 4 pm, Broward County Convention Center, 9th Annual Southeast Florida Regional Climate Leadership Summit, registration required.

## Awards Received—September 2017

FIU researchers were awarded \$21,501,668 in September 2017. Below is a listing of awards received:

#### Agarwal, Arvind

College of Engineering and Computing
Engineering Deans Office
National Science Foundation
NST ERC: Nanosystems Engineering Research Center

Initial \$89,102

#### Agarwal, Arvind

College of Engineering and Computing
Engineering Deans Office
Air Force Office of Scientific Research
Acquisition of Low Load Acquisition of a Low-Load Mechanical Testing Platform

Initial \$108,310

#### Almirall, Jose R

College of Arts, Sciences & Education Chemistry National Science Foundation FBI Laboratory Membership in the I/UCRC Increase

Increase \$25,000

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Bagner, Daniel

College of Arts, Sciences & Education

Psychology

Child Health and Human Development

Effect of Parent Emotion-Related Talk on Infant Behavior and Regulation

Increase \$468

Barbetta, Patricia

College of Arts, Sciences & Education

Teaching and Learning

Florida Department of Education

2017-2018 Exceptional Student Education (ESE Tuition Support Program)

Initial \$17,669

Bejar, Elizabeth M

Academic Affairs - Other Units

U.S. Department of Education

A Study of Completion Grants at Accessible Public Universities

Initial \$60,000

Bhat, Mahadev

College of Arts, Sciences & Education

Earth and Environment

U.S. Department of Agriculture

Veterans and Small Farmers Outreach and Assistance in South Florida

Initial \$178,125

Boeglin, Werner

College of Arts, Sciences & Education

**Physics** 

U.S. Department of Energy

A Fast Proton Diagnostic for NSTX

Continuation \$237,881

Boukerrou, Lakhdar

College of Arts, Sciences & Education

Institute of Water and Environment

U.S. Department of Defense

Africa Symposiums Support

Initial \$93,055

Boukerrou, Lakhdar

College of Arts, Sciences & Education

Institute of Water and Environment

U.S. Department of Defense

Africa Symposiums Support

Initial \$103,000

Briceno, Henry

College of Arts, Sciences & Education

SFRC

Environmental Protection Agency

Water Quality Monitoring Project for the Florida Keys

Increase \$174,500

Briceno, Henry

College of Arts, Sciences & Education—SERC

National Park Service

Mechanisms and Conditions responsible for elevated TP levels

Increase \$75,000

Caballero, Amaury

College of Engineering and Computing

Electrical and Computer Engineering

Miami-Dade County Public Schools

Electrical wiring Program for SED Students

Initial \$15,400

Cano Jr, Miguel A

Robert Stempel College of Public Health & Social Work

Epidemiology

Alcohol Abuse and Alcoholism

Ethnic Discrimination & Alcohol Risk Behaviors among Hispanic Adolescents

Initial \$105,437

Carmel, Justin H

College of Arts, Sciences & Education

Chemistry

National Science Foundation

Collaborative Research: Developing Items to Assess the Use

Initial \$188,270

Cirion, Yisell

Academic Affairs - Other Units

Career and Talent Development

Peace Corps

Peace Corps Strategic Recruiter

Continuation \$21,269

Cruz, Jeannette

Academic Affairs - Other Units

Multicultural Programs MMC

Office of Postsecondary Education

Student Support Services 2015-2020

Continuation \$232,265

De Caprio, Anthony

College of Arts, Sciences & Education

Chemistry

National Institute of Justice

Novel Blood Protein Modification Assay for Retrospective Detection

Initial \$467,885

De Caprio, Anthony

College of Arts, Sciences & Education

Chemistry

U.S. Department of Justice

Development of Improved Extraction/Purification Methods

Initial \$50,000

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De Caprio, Anthony

College of Arts, Sciences & Education

Chemistry

National Institute of Justice

Optimization of Pretreatment Parameters in Hair Analysis

Initial \$50,000

Dinehart, Laura H

College of Arts, Sciences & Education

School of Education

South Florida After-School All Stars Inc.

South Florida ASAS Transfer Agreement 2016-2017

Increase \$25,000

Fonseca, Brian

Steven J. Green School of International & Public Affairs

J Gordon Institute of Public Policy & Citizenship

Defense Intelligence Agency

Intelligence Community Centers for Academic Excellence

Initial \$300,000

Fourqurean, James

College of Arts, Sciences & Education

**Biology** 

National Park Service

Dry Tortugas National Park Seagrass Communities Assessment Project

Increase \$35,000

Fourqurean, James

College of Arts, Sciences & Education

**Biology** 

National Park Service

South Florida Caribbean Inventory and Monitoring Network

Increase \$56,000

Frankovich, Thomas A

College of Arts, Sciences & Education

SERC

National Park Service

Linkages of Water Quality, Submerged Aquatic Vegetation

Increase \$80,000

Gaiser, Evelyn

College of Arts, Sciences & Education—SEAS

National Science Foundation

LTER: FCE LTER III - Coastal Oligotrophic Ecosystems Research

Increase \$39,123

Gaiser, Evelyn

College of Arts, Sciences & Education—SEAS

National Park Service

Assessing Near-field and Landscape Scale Ecological Effects

Increase \$326,523

Gaiser, Evelyn

College of Arts, Sciences & Education—SEAS

South Florida Water Management District

Vegetation and periphyton monitoring in Biscayne Bay Coastal wetlands project

Initial \$45,300

Gann, Daniel

Academic Affairs - Other Units

GIS Center and Digital Collection

U.S. Army Corps of Engineers

Monitoring of Tree Island Condition in the Southern Ever

Increase \$18,622

Hadi, Mohammed A

College of Engineering and Computing

Civil and Environ Engineering

Florida Department of Transportation

SR 924/NW 119 Street Adaptive Signal Control Technology Pilot Project Evaluation Phase I

Initial \$36,874

Ibarra, Julio E

Academic Affairs - Other Units

**CIARA** 

National Science Foundation

Large Synoptic Survey Telescope (LSST)

Continuation \$5,041,500

Ibarra, Julio E

Academic Affairs - Other Units

**CIARA** 

National Science Foundation

IRNC: Backbone: Americas Africa Research and eduCation Lightpaths (AARCLight)

Increase \$200,000

Ibarra, Julio E

Academic Affairs - Other Units

**CIARA** 

National Science Foundation

IRNC Backbone - AmLight Express and Protect (ExP)

Continuation \$2,000,000

Ilcheva, Maria

Steven J. Green School of International & Public Affairs

Metropolitan Center

Citizens Independent Transportation Trust

2017 Citizens' Independent Transportation Trust (CITT) Transportation Summit Planning

Increase \$20

Jayachandran, Krishnaswamy

College of Arts, Sciences & Education

Earth and Environment

U.S. Department of Agriculture

A Foundation for New Farmers in South Florida

Initial \$300,000

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Jayachandran, Krishnaswamy

College of Arts, Sciences & Education

Earth and Environment

U.S. Department of Agriculture

START NOW "Student Training in Agricultural Research Techniques by

Continuation \$83,000

Kadko, David

Academic Affairs - Other Units

ARC Applied Research Center

National Science Foundation

Collaborative Research: Pb-210 and Po-210 as tracers of scavenging and export

Initial \$96,385

Kominoski, John

College of Arts, Sciences & Education

Biology

National Science Foundation

Collaborative Research: Do mangroves provide better coastal protection

Initial \$39,386

Kutateladze, Besiki Luka

Steven J. Green School of International & Public Affairs

Criminal Justice

National Institute of Justice

LGBTQ/GNC Hate Crimes in Miami

Initial \$499,597

Lagos, Leonel

Academic Affairs - Other Units

ARC Applied Research Center

Office of Environmental Management

Chemical Process Alternatives for Radioactive Waste

Continuation \$308,750

Lagos, Leonel

Academic Affairs - Other Units

ARC Applied Research Center

Office of Environmental Management

Environmental Remediation Science and Technology

Continuation \$308,750

Lagos, Leonel

Academic Affairs - Other Units-ARC

Office of Environmental Management

Waste and D & D Engineering and Technology Development

Continuation \$308,750

Lagos, Leonel

Academic Affairs - Other Units—ARC

Office of Environmental Management

DOE-FIU Science and Technology Workforce Development Program

Continuation \$308,750

Lagos, Leonel

Academic Affairs - Other Units—ARC

U.S. Department of Energy

Robust and Remote Radiation Hardened Robotic System for Tunnel Inspection

Increase \$15,000

Lisetti, Christine

College of Engineering and Computing

Computer Info Sciences

U.S. Department of Education

Interactive Virtual Training (IVT) for Early Career Teachers in Urban Schools

Increase \$146,877

Madhivanan, Purnima

Robert Stempel College of Public Health & Social Work

**Epidemiology** 

National Institutes of Health

Global Health Equity Scholars Program

Pre-Award \$6,000

Madhivanan, Purnima

Robert Stempel College of Public Health & Social Work

**Epidemiology** 

National Institutes of Health

Global Health Equity Scholars Program

Pre-Award \$25,000

Maziak, Wasim

Robert Stempel College of Public Health & Social Work

**Epidemiology** 

Fogarty International Center NIH

Translating evidence and building capacity to support water pipe control

Initial \$374,093

Miguez, Maria Jose

College of Arts, Sciences & Education

**SISH** 

National Institutes of Health

Alcohol and HIV: Bio-behavioral Interactions and Intervention-Year 3

Continuation \$142,433

Montas-Hunter, Sonja S

Academic Affairs - Other Units

Student Access and Success

U.S. Department of Education

Educational Talent Search Program 2016-2021

Continuation \$246,000

Montas-Hunter, Sonja S

Academic Affairs - Other Units

Student Access and Success

U.S. Department of Education

EV3 Robotics 2017-2018 21st Century Community Learning Centers

Initial \$61,935

Montas-Hunter, Sonja S Academic Affairs - Other Units—Student Access and Success U.S. Department of Education FIU McNair 2017-2022 Post-Baccalaureate Achievement Program Initial \$243,874 Montas-Hunter, Sonja S Academic Affairs - Other Units-Student Access and Success U.S. Department of Education FIU TRIO Upward Bound: Florida International University Upward Bound Increase \$10,863 Munroe, Norman D College of Engineering and Computing Mechanical and Mat Engineering National Action Council for Minorities NACME Initiative at Florida International University Increase \$5,000 Munroe, Norman D College of Engineering and Computing Mechanical and Mat Engineering National Action Council for Minorities NACME Initiative at Florida International University Increase \$15,000 Munroe, Norman D College of Engineering and Computing Mechanical and Mat Engineering Children's Trust FIU-ENLACE Initial \$434,682 Munroe, Norman D College of Engineering and Computing Mechanical and Mat Engineering Children's Trust FIU-ENLACE Initial \$77,811 Murray, Edward P Steven J. Green School of International & Public Affairs Metropolitan Center University of Miami JPMorgan + UM Housing Policy Toolkit Initial \$10,000 Odai, Michelle L

Nicole Wertheim College of Nursing & Health Sciences

Athletic Training

National Athletic Trainers' Association

Leadership Training to Support Improved Outcomes from Conference Travel

Initial \$4,992

O'Shea, Kevin

College of Arts, Sciences & Education—Chemistry

National Science Foundation

Collaborative Research: EAGER: Tailored sorbents for the removal of

Initial \$35,000

Pala, Nezih

College of Engineering and Computing

Electrical & Computer Engineering

Army Research Laboratory

3D Simulation of THz Plasmonic Structures

Increase \$7,105

Papastamatiou, Yannis Peter

College of Arts, Sciences & Education

**Biology** 

Earthwatch Institute

Shark and ray conservation in Belize

Initial \$53,497

Prospect, Sean Antonio

College of Arts, Sciences & Education

Community Engagement

After-School All Stars

Project SUPPORT (FIU After-School All-Stars) 2015-2016

Continuation \$13,185

Raiker Jr, Joseph

College of Arts, Sciences & Education

Psychology

Children's Trust

After-school support program for youth at-risk for behavior problems

Initial \$225,767

Rangaswami, Raju

College of Engineering and Computing

Computer Info Sciences

National Science Foundation

SHF: Small: Vertically Integrated Persistence

Initial \$450,000

Rangaswami, Raju

College of Engineering and Computing

Computer Info Sciences

National Science Foundation

**REU** 

Initial \$8,000

Ross, Michael S

College of Arts, Sciences & Education

Earth and Environment

National Park Service

Ecosystem dynamics in the White Zone: history, drivers, and restoration implications

Increase \$121,970

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Ross, Monique Serena Lara College of Engineering and Computing Computer Info Sciences National Science Foundation EAGER: Demystifying the Engineering and Computer Science Underrepresentation Initial \$71,206 Royles, Daniel E Steven J. Green School of International & Public Affairs Institute of Museum and Library Services Digital Archives for Virginia Key Initial \$7,664 Russell, Valerie College of Arts, Sciences & Education Leadership and Professional Studies U.S. Department of Education Training Worlds Ahead Vocational Rehabilitation Counselors at FIU Continuation \$54,865 Russell, Valerie College of Arts, Sciences & Education Leadership and Prof Stu U.S. Department of Education Subproject to 800005813: Student Support No F&A Continuation \$125,135 Sah, Jay P College of Arts, Sciences & Education **SERC** U.S. Army Corps of Engineers Landscape pattern - Marl Prairie/Slough Gradients Increase \$96,280 Sah, Jay P College of Arts, Sciences & Education **SERC** U.S. Army Corps of Engineers Monitoring of Tree Island Condition in the Southern Everglades Increase \$73,846 Sah, Jay P College of Arts, Sciences & Education **SERC** U.S. Army Corps of Engineers Landscape Pattern-Ridge, Slough, and Tree Island Mosaics \$91,690 Increase

Sarmiento, Juan Pablo

Academic Affairs - Other Units-Extreme Events Institute

US Agency for International Development

The Disaster Resilience and Climate in the Americas Program (DRCAP)

Increase \$260,000

Sheehan Delgado, Diana Montserrat

Robert Stempel College of Public Health & Social Work

Epidemiology

Robert Wood Johnson Foundation

Role of social disorganization on sexual risk behavior

Initial \$50,000

Soto Caro, Fabian

College of Arts, Sciences & Education

Psychology

National Institute of Mental Health

Perceptual and decisional processes underlying face perception biases

Initial \$239,809

Sousa, Jacqueline Bueno

College of Business Administration Dean's Office

U.S. Small Business Administration

SBDC FIU 2017 - (FED - MAIN)

Increase \$31,760

Tansel, Ibrahim N

College of Engineering and Computing

Mechanical and Mat Engineering

University of Central Florida

NEESAT Eclipse Ballooning 2017 (NEB2017)

Initial \$4,200

Thiel, Markus

Steven J. Green School of International & Public Affairs

Politics and Intl Relations

Federal Republic of Germany

Germany: making choices

Initial \$1,000

Traynor, Mark Patrick

Chaplin School of Hospitality and Tourism Management

Hospitality and Tourism Management

U.S. Department of Agriculture

2017-2018 Cochran Fellowship Program

Initial \$87,626

Trexler, Joel

College of Arts, Sciences & Education

Biology

South Florida Water Management District

Otolith Analysis of Everglades

Initial \$9,985

Trexler, Joel

College of Arts, Sciences & Education

**Biology** 

U.S. Army Corps of Engineers

Response of Fish to the DECOMP Physical Model

Initial \$165,000

Triay Melendez, Ines

Academic Affairs - Other Units—ARC

U.S. Department of Energy

MSI Mission-to-Market for Inclusive Economic Development

Initial \$249,376

Uluagac, Arif Selcuk

College of Engineering and Computing

Electrical & Computer Engineering

National Science Foundation

SaTC: TTP: Small: Collaborative: WACA: Wearable-Assisted

Initial \$357,200

Underwood, Sonia Miller

College of Arts, Sciences & Education—Chemistry

National Science Foundation

Collaborative Research: Creating assessments for student understanding

Initial \$150,495

**Underwood, Sonia Miller** 

College of Arts, Sciences & Education—Chemistry

National Science Foundation

Collaborative Research: Extending the Coherent Gateway to STEM

Initial \$161,487

Volakis, John

College of Engineering and Computing

**Engineering Deans Office** 

Northrop Grumman

Wideband Phased Array Studies

Supplemental \$15,000

Volakis, John

College of Engineering and Computing

**Engineering Deans Office** 

National Science Foundation

A New Class of Millimeter-wave Phased Array for Secure High Data

Initial \$169,859

Volakis, John

College of Engineering and Computing

**Engineering Deans Office** 

**Rockwell Collins** 

Planar Differential Tightly Coupled Dipole Array

Initial \$40,000

Wagner, Eric

Robert Stempel College of Public Health & Social Work

School of Social Work

National Institutes of Health

FIU-RCMI

Initial \$2,624,990

Wagner, Eric

Robert Stempel College of Public Health & Social Work

School of Social Work

Health Resources & Services Administration

Behavioral Health Workforce Education and Training (BHWET) Program

Initial \$466,073

Williams, Mark L

Robert Stempel College of Public Health & Social Work

Health Policy and Management

National Institutes of Health

HIV risk and prevention venue affiliation among young (R01)

Increase \$2,829

Willoughby, Hugh E

College of Arts, Sciences & Education

Earth and Environment

National Science Foundation

Mechanisms for Hurricane Motion and Intensity Change

Initial \$81,951

Xiao, Yi

College of Arts, Sciences & Education

Chemistry

National Institute of Justice

Electrochemical and Colorimetric Aptamer-Based Sensors f

Continuation \$49,996

Zevallos, Juan Carlos

Herbert Wertheim College of Medicine

Medical & Population Health Sciences Research

Baptist Health South Florida

Innovative Cardiac Health Intervention

Initial \$198,000

Zhong, Yu

College of Engineering and Computing

Mechanical and Mat Engineering

U.S. Department of Energy

The Novel Hybrid Start-Off Model of High Performance Structural Alloys

Increase \$80,295

Funding Opportunities

ORED has a new, improved and interactive webpage for funding opportunities. Please visit http://research.fiu.edu/funding/#current.

### Limited Submissions

Current limited submission opportunities are available at http://research.fiu.edu/funding/limited-submissions/.

Contact ORED Senior Leadership

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